

In the  
**United States Court of Appeals**  
for the Federal Circuit

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In re: UNIVERSAL ELECTRONICS INC.,

*Appellant.*

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Appeal from the United States Patent and Trademark Office,  
Patent Trial and Appeal Board in No. 15/962,451.

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**BRIEF OF APPELLANT UNIVERSAL ELECTRONICS INC.**

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## **IDENTIFICATION OF EXEMPLARY CLAIMS**

**Claim 1.** A method performed by a switching device that is operable to connect at least one of a plurality of source devices to a sink device, the method comprising:

detecting an infrared (IR) signal transmitted by a remote control device, wherein the IR signal transmitted by the remote control device comprises a protocol and a command value that is directly recognizable by a first device among the plurality of source devices and the sink device;

in response to the detection of the IR signal, determining that the remote control device is in use; and

in response to determining that the remote control device is in use, controlling a connection between the at least one of the plurality of source devices and the sink device as a function of the detected IR signal.

**Claim 5.** A switching device, comprising:

a plurality of audio/video (AV) ports;

a receiver; and

control logic that is operable to selectively connect at least one of a plurality of source devices to a sink device each of which is connected to a corresponding one of the plurality of AV ports, the control logic being configured to:

determine that the receiver has received an infrared (IR) signal transmitted by a remote control device, wherein the IR signal transmitted by the remote control device comprises a protocol and a command value that is directly recognizable by a first device among the plurality of source devices and the sink device;

in response to determining that the receiver has received the IR signal, determine that the remote control device is in use; and

in response to at least determining that the remote control device is in

use, controlling a connection between the at least one of the plurality of source devices and the sink devices as a function of the detected IR signal.

**Claim 9.** A switching device, comprising:

a plurality of audio/video (AV) ports;

a receiver; and

control logic that is operable to selectively connect at least one of a plurality of source devices to a sink device each of which is connected to a corresponding one of the plurality of AV ports, the control logic being configured to:

determine that the receiver has received an infrared (IR) signal transmitted by a remote control device, wherein the IR signal transmitted by the remote control device comprises a protocol and a command value that is directly recognizable by at least a source device among the plurality of source devices and the sink device;

in response to determining that the receiver has received the IR signal, determine that the remote control device is in use; and

in response to determining that the remote control device is in use:

identify the source device that is associated with the remote control device from among the plurality of source devices;

identify a first AV port from among the plurality of AV ports to which the identified source device is connected; and connect the first AV port to the AV port to which the sink device is connected.

## CERTIFICATE OF INTEREST

Pursuant to Federal Circuit Rule 47.4, counsel for Appellant certifies the following:

1. **Represented Entities.** Provide the full names of all entities represented by the undersigned counsel in this case.

Universal Electronics Inc.

2. **Real Party in Interest.** Provide the full names of all real parties in interest for the entities.

None / Not Applicable

3. **Parent Corporations and Stockholders.** Provide the full names of all parent corporations for the entities and all publicly held companies that own 10% or more stock in the entities.

BlackRock, Inc.

Eagle Asset Management, Inc.

Carillon Tower Advisers, Inc.

4. **Legal Representatives.** List all law firms, partners, and associates that (a) appeared for the entities in the originating court or agency or (b) are expected to appear in this court for the entities.

None / Not Applicable

5. **Related Cases.** Provide the case titles and numbers of any case known to be pending in this court or any other court or agency that will directly affect or be directly affected by this court's decision in the pending appeal.

None / Not Applicable

6. **Organizational Victims and Bankruptcy Crimes.** Provide any information required under Fed. R. App. P. 26.1(b) (organizational victims in criminal cases) and 26.1(c) (bankruptcy case debtors and trustees).

None / Not Applicable

Dated: June 23, 2022

/s/ James J. Lukas, Jr.

Attorney for Appellant

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## **I. STATEMENT OF RELATED CASES**

This is an appeal from the Patent Trial and Appeal Board’s (“Board”) decision affirming a rejection of claims 1-12 of Appellant Universal Electronics Inc.’s (“UEI”) U.S. Patent App. No. 15/962,451 (“the ‘451 application”). There has been no prior appeal from this proceeding in this or any other appellate court, and counsel is not aware of any case that will be directly affected by the Court’s decision in this appeal.

## **II. JURISDICTIONAL STATEMENT**

This is an appeal from the Board’s October 8, 2021 Decision on Appeal (“Decision”) affirming a rejection of claims 1-12 of the ‘451 application as obvious under 35 U.S.C. § 103. (Appx1-17.) UEI timely filed a notice of appeal on December 10, 2021, within the time limit set by 35 U.S.C. § 142 and 37 C.F.R. § 90.3. (Appx364-366.) This Court therefore has jurisdiction over this appeal under 35 U.S.C. § 141(a) and 28 U.S.C. § 1295(a)(4)(A).

## **III. STATEMENT OF THE ISSUES**

1. Whether the Board erred in affirming the Examiner’s rejection of claims 1-12 of the ‘451 application as unpatentable under 35 U.S.C. § 103 where the Board and the Examiner failed to establish a *prima facie* case of obviousness because the Examiner conceded that Garg does not disclose the claimed “switching device” and the Examiner did not propose any modifications to Garg’s “switching device”?

2. Whether the Board erred in affirming the Examiner's rejection of claims 1-12 of the '451 application as unpatentable under 35 U.S.C. § 103 where the Board and the Examiner failed to articulate any reason with a rational underpinning why a person of ordinary skill in the art would have been motivated to combine Garg with Igoe as the Examiner proposed?

#### **IV. STATEMENT OF THE CASE**

##### **A. The '451 Application And Its Claims.**

The '451 application is a continuation of U.S. Patent App. No. 13/225,635 (filed on September 6, 2011, now U.S. Patent No. 10,162,316). (Appx37.) The '451 application and its claims are directed to a novel "switching device" for use in "systems in which more than one controlling device may be available for the operation of an appliance or group of appliances." (Appx38, Appx48.)

The "switching device" of the '451 application (*e.g.*, AV receiver 902) is connected to and capable of switching between multiple source devices (*e.g.*, cable set-top box 104 and DVD player 904) and sink devices (*e.g.*, TV set 106). (Appx48 (at 12:3-5).) The "switching device" is adapted to detect which one of several controlling devices (*e.g.*, remote control devices 906, 907, 908), each of which corresponds to a separate source or sink device, is currently in use. (*Id.* (at 12:5-7).) Once the "switching device" determines which controlling device is in use, the "switching device" will configure itself accordingly by, for example, selecting

appropriate inputs and outputs, setting audio volume and equalization levels, etc. (*Id.* (at 12:7-8).) The “switching device” is provided with a universal IR receiver such that the “switching device” can identify, decode, and respond to commands intended for devices of a variety of different manufacturers. (*Id.* (at 12:12-15).)

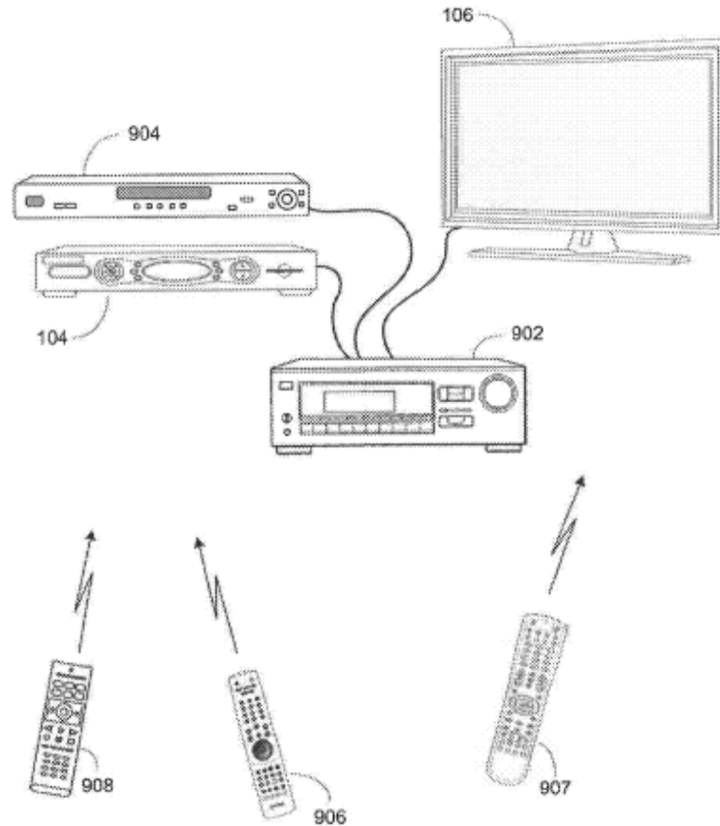


Figure 9

(Appx63 (at FIG. 9).)

The ‘451 application contains three independent claims: claims 1, 5, and 9. (Appx23-26.) Claims 1, 5, and 9 of the ‘451 application are reproduced below:

1. A method performed by a switching device that is operable to connect at least one of a plurality of source devices to a sink device, the method comprising:

detecting an infrared (IR) signal transmitted by a remote control device, wherein the IR signal transmitted by the remote control device comprises a protocol and a command value that is directly recognizable by a first device among the plurality of source devices and the sink device;

in response to the detection of the IR signal, determining that the remote control device is in use; and

in response to determining that the remote control device is in use, controlling a connection between the at least one of the plurality of source devices and the sink device as a function of the detected IR signal.

(Appx23 (at claim 1).)

5. A switching device, comprising:

a plurality of audio/video (AV) ports;

a receiver; and

control logic that is operable to selectively connect at least one of a plurality of source devices to a sink device each of which is connected to a corresponding one of the plurality of AV ports, the control logic being configured to:

determine that the receiver has received an infrared (IR) signal transmitted by a remote control device, wherein the IR signal transmitted by the remote control device comprises a protocol and a command value that is directly recognizable by a first device among the plurality of source devices and the sink device;

in response to determining that the receiver has received the IR signal, determine that the remote control device is in use; and

in response to at least determining that the remote control device is in use, controlling a connection between the at least one of the plurality of source devices and the sink devices as a function of the detected IR signal.

(Appx24 (at claim 5).)

9. A switching device, comprising:

a plurality of audio/video (AV) ports;

a receiver; and

control logic that is operable to selectively connect at least one of a plurality of source devices to a sink device each of which is connected to a corresponding one of the plurality of AV ports, the control logic being configured to:

determine that the receiver has received an infrared (IR) signal transmitted by a remote control device, wherein the IR signal transmitted by the remote control device comprises a protocol and a command value that is directly recognizable by at least a source device among the plurality of source devices and the sink device;

in response to determining that the receiver has received the IR signal, determine that the remote control device is in use; and

in response to determining that the remote control device is in use:

identify the source device that is associated with the remote control device from among the plurality of source

devices;

identify a first AV port from among the plurality of AV ports to which the identified source device is connected; and connect the first AV port to the AV port to which the sink device is connected.

(Appx25-26 (at claim 9).)

Notably, each of independent claims 1, 5, and 9 of the ‘451 application is specifically directed to a “switching device” and requires that the claimed “switching device” must: (i) detect/receive an infrared (“IR”) signal transmitted by a remote control device, wherein the IR signal transmitted by the remote control device comprises a protocol and a command value that is directly recognizable by a first device among a plurality of source devices and a sink device; and (ii) respond to the detection/reception of the IR signal by controlling a connection between at least one of the plurality of source devices and the sink devices as a function of the detected IR signal. (Appx23-26.)

## **B. The Prior Art References At Issue In This Appeal.**

### **1. Garg.**

U.S. Patent Application Publication No. 2007/0220150 to Garg (“Garg”) was published on September 20, 2007. (Appx401.) Garg is directed to a “convenient, low-cost method ... for switching between one or more source devices, which are connected to a sink device via a multimedia interface. (*Id.* (at Abstract).) Garg

discloses a stand-alone HDMI™ hub 500 that “may include a plurality of input ports (510) for connecting a plurality of source devices (520) to one or more sink devices (530) via one or more output ports (540).” (Appx412 (at [0060]).) The hub 500 may include “remote selection means for connecting a particular source device to the sink,” such as “an IR input port (590) ... for receiving optical commands transmitted from an IR remote control.” (Appx413 (at [0064]).)

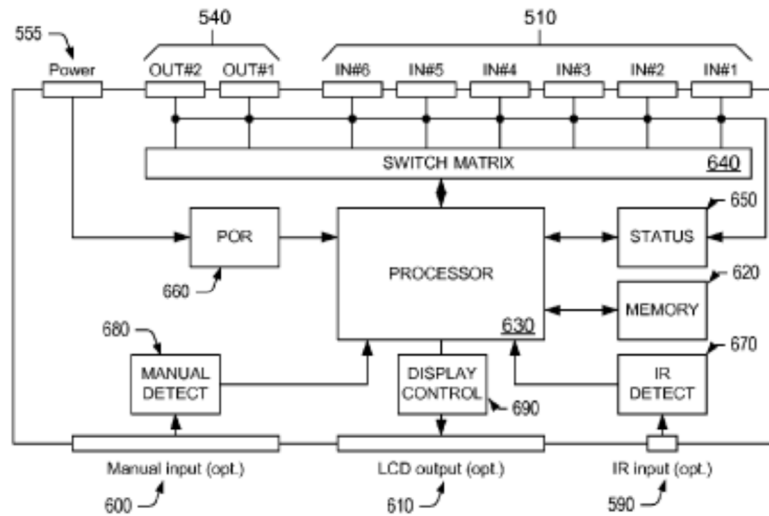


FIG. 5D

(Appx406 (at FIG. 5D).)

The remote selection means “may be used to assign priority data to the connected source devices.” (Appx413 (at [0066]).) According to Garg, “a user may assign priority data by transmitting a series of optical commands to the IR input port (590) of the hub (500). In such an example, the user may transmit the optical commands using a remote control device supplied with the hub.” (*Id.*) In other



words, Garg discloses that its remote control device is specific to the hub 500. (*Id.*) There is no dispute that Garg does not disclose the claimed “switching device.” (Appx229, Appx231-232, Appx234-235.)

## **2. Igoe.**

U.S. Patent Application Publication No. 2013/0187767 to Igoe (“Igoe”) was published on July 25, 2013. (Appx432.) Igoe is directed to a “method of detecting missing devices in a home entertainment system using a wireless home entertainment hub.” (*Id.* (at Abstract).) Igoe discloses a wireless home entertainment hub (“WHEH”) 102 that facilitates the transfer of data between source and sink devices in a home entertainment system (“HES”) 100, and coordinates the interaction between a user 120 and source and sink devices 122, 124. (Appx449 (at [0027]).) Igoe discloses that a remote control 118 may be used with the HES 100. (Appx452 (at [0047]).) According to Igoe, the remote control 118 sends commands directly to a source device (*e.g.*, DVD player 104 or a set-top box) based on an indication of the currently active source from the WHEH 102. (*Id.*)

## **C. The Prosecution History Of The ‘451 Application.**

### **1. The Initial Prosecution Of The ‘451 Application.**

The ‘451 application was filed with twelve original claims. (Appx50-53.) Original independent claim 1 contained the limitation “detecting [with a switching device] an infrared (IR) signal transmitted by a remote control device that is operable

to control a first device among the plurality of source devices and the sink device...” (Appx50 (at claim 1).) Original independent claims 5 and 9 similarly recited the limitations “determine that the receiver [of a switching device] has received an infrared (IR) signal transmitted by a remote control device that is operable to control a first device among the plurality of source devices and the sink device” and “determine that the receiver [of a switching device] has received an infrared (IR) signal transmitted by a remote control device that is operable to control at least a source device among the plurality of source devices and the sink device,” respectively. (Appx51 (at claim 5); Appx52 (at claim 9).)

The Examiner rejected original independent claims 1, 5, and 9 as being anticipated by Garg. (Appx97.) In response, UEI asserted that Garg does not disclose, teach, or suggest the claimed switching device that will detect an IR signal transmitted by a remote control device that is operable to control a *source device* because Garg expressly discloses that the IR signals transmitted by Garg’s remote control device are specific to Garg’s hub 500 (*i.e.*, Garg’s remote control device controls only Garg’s alleged switching device, and Garg’s alleged switching device only recognizes and responds to IR signals intended for Garg’s alleged switching device). (Appx136-138; *see also* Appx180-183, Appx191-192.)

The Examiner responded that Garg *does* disclose that its alleged switching

device will detect and respond to a transmission of an IR signal from a remote control that is operable to control a device other than the alleged switching device because Garg discloses that the outcome of the IR communications between Garg's remote control device and Garg's alleged switching device is that a source device and an associated sink device are connected (*i.e.*, the IR signals from Garg's remote control device to Garg's alleged switching device ***indirectly*** control a source device through the alleged switching device). (Appx148-149, Appx186.)

UEI subsequently filed a request for continued examination containing amendments to pending independent claims 1, 5, and 9 that clarified that the IR signal transmitted by the remote control device that the switching device detects/receives and responds to must comprise "a protocol and a command value that is ***directly recognizable***" by a source device. (Appx213-216 (emphasis added).) UEI also asserted that Garg does not disclose, teach, or suggest the claimed switching device that detects/receives and responds to an IR signal that comprises a protocol and a command value that is directly recognizable by a source device because Garg fails to disclose that its alleged switching device can recognize an IR signal intended for a device ***other than the alleged switching device***. (Appx217-218.)

## **2. The Examiner's Final Office Action.**

On August 22, 2019, the Examiner issued a Final Office Action rejecting amended claims 1-12 of the '451 application. (Appx225-226.) Independent claims 1, 5, and 9 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Garg in view of Igoe. (Appx228.)

In the Final Office Action, the Examiner conceded that Garg fails to disclose the claimed switching device because Garg does not disclose the limitation “wherein the IR signal transmitted by the remote control device [and detected/received by the switching device] comprises a protocol and a command value that is directly recognizable by a first device among the plurality of source devices and the sink device” recited in claims 1 and 5 of the '451 application, and the limitation “wherein the IR signal transmitted by the remote control device [and detected/received by the switching device] comprises a protocol and a command value that is directly recognizable by at least a source device among the plurality of source devices and the sink device” recited in claim 9 of the '451 application. (Appx229, Appx231-232, Appx234-235.) Nevertheless, the Examiner asserted that Igoe discloses these limitations. (Appx229 (citing Appx452 (at [0047])), Appx232 (same), Appx235 (same).) The Examiner also argued that “it would have been obvious to one [of] ordinary skill in the art at the time the invention was made to incorporate the

system/method of sending control command [sic] to DVD as disclosed by Igoe to the remote controller as disclosed by Garg in order to communicate with external devices via remote controller.” (Appx230, Appx232, Appx235.)

### **3. UEI’s Appeal Arguments.**

In UEI’s Appeal Brief, UEI first reiterated the Examiner’s admission that Garg does not disclose, teach, or suggest the claimed “switching device” that is operable to detect/receive and respond to an IR signal transmitted by a remote control device wherein the IR signal “comprises a protocol and a command value that is directly recognizable by a first device among the plurality of source devices and the sink device” that are connected to the switching device. (Appx285; *see also* Appx287 (“nothing within Garg discloses, teaches, or suggests that the switching device of Garg is intended to detect/receive an IR signal that is operable to control a device other than the **switching device**”) (emphases in original).)

Next, UEI asserted that, “while it was concluded that ‘it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the system/method **of sending control command to DVD** as disclosed by Igoe **to the remote controller** as disclosed by Garg in order to communicate with external devices **via the remote controller**’ ..., it was not asserted that it would have been obvious, based on the teachings of Igoe, to modify the *switching device*

of Garg such that the switching device of Garg would be operable *to detect/receive and respond to* an infrared (IR) signal transmitted by a remote control device **wherein the IR signal transmitted by the remote control device comprises a protocol and a command value that is directly recognizable by a first device among the plurality of source devices and the sink device**, i.e., the invention claimed.” (Appx285-286 (emphases in original).)

UEI concluded that the requirements for presenting a *prima facie* case of obviousness had not been met and the rejection of claims 1-12 of the ‘451 application should be withdrawn because: (i) even if the alleged switching device of Garg were modified in view of Igoe in the manner the Examiner proposed, Garg’s modified alleged switching device would still not be the claimed switching device; and (ii) the Examiner failed to provide the requisite rationale for combining Garg with Igoe to support the conclusion of obviousness. (Appx286; *see also* Appx287-288.)

#### **4. The Board’s Decision.**

The Board issued its Decision affirming the rejection of claims 1-12 of the ‘451 application on October 8, 2021. (Appx1-2.) According to the Board, “the Examiner’s rejection clearly satisfies the requirement of 35 U.S.C. § 132 to establish a *prima facie* case of unpatentability” because “[t]he rejection identifies: the theory of unpatentability (obviousness); the prior art basis for the rejection (Garg and Igoe);

where each limitation of claim 5 is shown in the references by paragraph and figure numbers, plus additional explanation about how the prior art features are mapped to the claim.” (Appx8 (citing *In re Jung*, 637 F.3d 1356, 1363 (Fed. Cir. 2011)).)

With respect to UEI’s argument that the Examiner’s proposed combination of Garg with Igoe would not result in the invention as claimed, the Board stated that “[t]he Examiner finds—and [UEI] does not persuasively dispute—Garg teaches: A switching device ... determine that the receiver has received an infrared (IR) signal transmitted by a remote control device, ... a first device among the plurality of source devices and the sink device ... Igoe does not need to teach those limitations again.” (Appx8-9; *see also* Appx11 (“As discussed above, the Examiner cites Garg—not Igoe—for teaching the determining limitation (as recited in claim 5) and the detecting limitation (as recited in claim 1).”).) Notably, the Board **ignored** the limitation “wherein the IR signal transmitted by the remote control device [and detected/received by the switching device] comprises a protocol and a command value that is directly recognizable by [a first device among the plurality of source devices and the sink device],” which the Examiner **conceded** was not present in Garg and which was at the center of UEI’s argument on appeal. (*Id.*; *see also* Appx229, Appx231-232, Appx234-235, Appx285-286.) The Board then concluded that UEI’s argument was “unpersuasive” because it was purportedly “not directed to the

Examiner’s specific findings and conclusions.” (Appx9.)

With respect to UEI’s argument that the Examiner failed to provide the requisite rationale for combining Garg with Igoe as proposed, the Board stated that “the Examiner finds one skilled in the art would have modified Garg’s system to incorporate Igoe’s feature in order to facilitate communications with the remote controller.” (Appx11.) The Board found that UEI “does not persuasively show why such reasoning is incorrect.” (*Id.*) The Board also found that UEI’s argument “is moot in light of the Examiner’s refined rationale for the proposed combination.” (Appx12.) Notably, the Board failed to identify this purported “refined rationale.” (*Id.*)

Ultimately, the Board affirmed the Examiner’s decision rejecting claims 1-12 of the ‘451 application as obvious under 35 U.S.C. § 103. (Appx17.)

## **V. SUMMARY OF THE ARGUMENT**

The Board’s Decision affirming the Examiner’s rejection of claims 1-12 of the ‘451 application as obvious under 35 U.S.C. § 103 should be reversed for two reasons.

First, the rejection of claims 1-12 of the ‘451 application should be reversed because the Board and the Examiner failed to establish a *prima facie* case of obviousness. Each claim of the ‘451 application recites or requires a “switching



device” that must detect/receive and respond to an IR signal that is directly recognizable by a separate device (*i.e.*, first device among a plurality of source devices and a sink device). The Examiner conceded that the primary reference, Garg, fails to disclose the claimed “switching device” that detects/receives and responds to an IR signal that is directly recognizable by a separate device. While the Examiner proposed modifying Garg’s *remote controller* in view of Igoe to send control commands to Garg’s DVD player, the Examiner failed to propose any modifications to Garg’s alleged “*switching device*.” Because the Examiner did not propose modifying Garg’s alleged “switching device” to be the *claimed* “switching device” of the ‘451 application, the Examiner’s proposed combination of Garg with Igoe cannot disclose, teach, or suggest the claimed invention of the ‘451 application. *See In re Bell*, 991 F.2d 781, 783 (Fed. Cir. 1993) (reversing the examiner’s obviousness rejection for failure to establish a *prima facie* case of obviousness where the PTO failed to show “how the prior art references, either alone or in combination, teach or suggest the claimed invention.”).

Second, the rejection of claims 1-12 of the ‘451 application should be reversed because the Board and the Examiner failed to articulate any reason with a rational underpinning why a person of ordinary skill in the art (“POSITA”) would have been motivated to combine Garg with Igoe as the Examiner proposed. According to the

Board and the Examiner, a POSITA would have been motivated to modify Garg's remote controller to communicate with an external device via the remote controller because it purportedly would have been obvious to communicate with an external device via the remote controller. The Board's and the Examiner's reasoning is entirely circular, and thus the Board and the Examiner failed to articulate any reason with a rational underpinning why a POSITA would have been motivated to combine Garg with Igoe as proposed. *See In re Giannelli*, 739 F.3d 1375, 1380 (Fed. Cir. 2014) (reversing the Board's conclusion of obviousness where the Board's analysis "contained no explanation why or how a person having ordinary skill in the art would modify the prior art" to arrive at the claimed invention).

Accordingly, UEI respectfully requests that this Court reverse the Board's Decision affirming the Examiner's rejection of claims 1-12 of the '451 application as obvious under 35 U.S.C. § 103.

## **VI. ARGUMENT**

### **A. Standard of Review.**

Obviousness is a question of law, based on underlying factual questions. *In re NTP, Inc.*, 654 F.3d 1279, 1297 (Fed. Cir. 2011). A claim is obvious "if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art..." 35 U.S.C. § 103

(Pre-AIA). This Court reviews factual findings supporting an obviousness decision for substantial evidence, and reviews the Board’s legal conclusion of obviousness *de novo*. *In re Giannelli*, 739 F.3d 1375, 1379 (Fed. Cir. 2014). “A finding is supported by substantial evidence if a reasonable mind might accept the evidence to support the finding.” *Id.*

To reject claims in an application under Section 103, an examiner must show an unrebutted *prima facie* case of obviousness. *See In re Deuel*, 51 F.3d 1552, 1557 (Fed. Cir. 1995). In the absence of a proper *prima facie* case of obviousness, an applicant who complies with the other statutory requirements is entitled to a patent. *See In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992). To establish a *prima facie* case of obviousness based on a combination of elements disclosed in the prior art, the Board must articulate the basis on which it concludes that it would have been obvious to make the claimed invention. *In re Kahn*, 441 F.3d 977, 986 (Fed. Cir. 2006). “[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *Id.* at 988.

**B. The Board Erred In Holding Claims 1-12 Of The ‘451 Application Unpatentable As Obvious Over Garg In View Of Igoe Because the Board And The Examiner Failed To Establish A *Prima Facie* Case Of Obviousness.**

**1. The Board And The Examiner Failed To Show That Garg And Igoe, Alone Or In Combination, Disclose, Teach, Or Suggest The Claimed Invention.**

The Board and the Examiner failed to establish a *prima facie* case of obviousness, and the rejection of claims 1-12 of the ‘451 application should be reversed, because the Board and the Examiner failed to show that Garg and Igoe, either alone or in combination, disclose, teach, or suggest the claimed invention of the ‘451 application.

An obviousness rejection must be reversed for failure to establish a *prima facie* case of obviousness where the PTO fails to show “how the prior art references, either alone or in combination, teach or suggest the claimed invention.” *See In re Bell*, 991 F.2d 781, 783 (Fed. Cir. 1993) (reversing the examiner’s obviousness rejection); *see also Orexo AB v. Actavis Elizabeth LLC*, 903 F.3d 1265, 1271 (Fed. Cir. 2018) (holding that a finding of obviousness requires a showing “that a person of ordinary skill would have selected and combined and modified the subject matter of the references *in the manner of the claimed invention*, with a reasonable expectation of success.”) (emphasis added); *In re Jansson*, 609 F.2d 996, 999 (CCPA 1979) (reversing the examiner’s obviousness rejection where the combined

references would not have suggested the claimed method of die fabrication as a whole to one of ordinary skill in art).

Here, each of independent claims 1, 5, and 9 of the ‘451 application recites a “switching device” that: (i) must detect/receive an IR signal that comprises a protocol and a command value that is directly recognizable by a *separate device* (*i.e.*, first device among a plurality of source devices and a sink device); and (ii) must respond to the detection/reception of that IR signal by controlling a connection between at least one of the plurality of source devices and the sink devices as a function of the detected IR signal. (Appx23-26.)

The Board and the Examiner failed to establish a *prima facie* case of obviousness because the Examiner’s proposed combination of Garg with Igoe—which involved modifying only Garg’s remote controller—fails to disclose, teach, or suggest the claimed “switching device” that detects/receives and responds to an IR signal that is directly recognizable by a separate device, as recited in each of independent claims 1, 5, and 9 of the ‘451 application.

As the Examiner admitted, Garg does not disclose the claimed “switching device” of the ‘451 application that detects/receives and responds to an IR signal that is directly recognizable by a separate device. (Appx229, Appx231-232, Appx234-235.) Rather, Garg discloses that its hub 500 (*i.e.*, the alleged switching

device) detects/receives and responds to IR signals that are intended *only for the hub 500*. (Appx413 (at [0066]); *see also* Appx136-138, Appx180-183, Appx191-192.) In other words, to teach the claimed “switching device” of the ‘451 application, Garg’s hub 500 would need to be modified such that it could also detect/receive and respond to IR signals intended *for a separate device*.

Notably, however, the Examiner did not propose any modifications to Garg’s hub 500. (Appx230, Appx232, Appx235.) Instead, the Examiner proposed modifying only Garg’s *remote controller*. (*Id.*) Because the Examiner did not propose modifying Garg’s alleged switching device to be the *claimed* “switching device” of the ‘451 application, the Examiner’s proposed combination of Garg with Igoe cannot disclose, teach, or suggest the claimed invention of the ‘451 application, and the Examiner’s rejection of claims 1-12 should be reversed. *See In re Bell*, 991 F.2d at 783.

Despite the Examiner’s failure to propose any modifications to Garg’s alleged switching device, the Board rejected UEI’s argument that the Examiner’s proposed combination of Garg with Igoe does not disclose, teach, or suggest the claimed invention of the ‘451 application because the Examiner purportedly found that “Garg teaches: A switching device ... determine that the receiver has received an infrared (IR) signal transmitted by a remote control device, ... a first device among the

plurality of source devices and the sink device ... [and] Igoe does not need to teach those limitations again.” (Appx8-9; *see also* Appx11 (“As discussed above, the Examiner cites Garg—not Igoe—for teaching the determining limitation (as recited in claim 5) and the detecting limitation (as recited in claim 1).”).)

However, the Board’s finding *omitted and ignored* the limitation “wherein the IR signal transmitted by the remote control device [and detected/received by the switching device] comprises a protocol and a command value that is directly recognizable by a first device among the plurality of source devices and the sink device,” which the Examiner expressly *admitted* was not present in Garg and which was the focus of UEI’s argument on appeal. (Appx8-9; *see also* Appx229, Appx231-232, Appx234-235, Appx285-286.) Notably, the Board failed to explain how the Examiner’s proposed combination of Garg with Igoe—which, again, involved modifying only Garg’s remote controller—could disclose, teach, or suggest the claimed “switching device” of the ‘451 application. (*Id.*)

Accordingly, the Board and the Examiner failed to establish a *prima facie* case of obviousness, and this Court should reverse the rejection of claims 1-12 of the ‘451 application.

**2. The Board And The Examiner Failed To Articulate Any Reason With A Rational Underpinning Why A POSITA Would Have Been Motivated To Combine Garg With Igoe.**

The rejection of claims 1-12 of the '451 application should also be reversed because the Board and the Examiner failed to articulate any reason with a rational underpinning why a POSITA would have been motivated to combine Garg with Igoe.

“[T]he Board must explain the reasons one of ordinary skill in the art would have been motivated to select the references and to combine them to render the claimed invention obvious.” *In re Rouffet*, 149 F.3d 1350, 1359 (Fed. Cir. 1998). The Board’s articulated reasoning must have “some rational underpinning to support the legal conclusion of obviousness.” *In re Kahn*, 441 F.3d at 988; *see also In re Dembiczak*, 175 F.3d 994, 999 (Fed. Cir. 1999) (the showing of a motivation to combine must be clear and particular, and it must be supported by actual evidence). Absent any proper motivation to combine the prior art, the rejection of the appellant’s claims must be reversed for failure to show a proper *prima facie* case of obviousness. *See In re Rouffet*, 149 F.3d at 1359 (reversing the Board’s conclusion of obviousness where, “[l]acking a motivation to combine references, the Board did not show a proper *prima facie* case of obviousness.”); *see also In re Giannelli*, 739 F.3d at 1380 (reversing the Board’s conclusion of



obviousness where the Board's analysis "contained no explanation why or how a person having ordinary skill in the art would modify the prior art" to arrive at the claimed invention).

Here, the Examiner proposed modifying Garg's remote controller to communicate with an external device (*i.e.*, a DVD player) "in order to communicate with external devices via remote controller." (Appx230, Appx232, Appx235.) The Board merely repeated the Examiner's argument and then concluded, without explanation, that "[t]he Examiner has provided articulated reasoning with a rational underpinning as to why one skilled in the art would have found it obvious to combine the teachings of Garg and Igoe." (Appx11.)

The Board and the Examiner failed to articulate any reason with a rational underpinning why a POSITA would have been motivated to combine Garg with Igoe because the alleged motivation to combine (*i.e.*, to communicate with external devices via the remote controller) merely repeats the proposed modification to Garg (*i.e.*, modifying Garg's remote controller to communicate with an external device via the remote controller). In other words, the Board and the Examiner asserted that a POSITA would have been motivated to modify Garg's remote controller to communicate with an external device via the remote controller because it purportedly would have been obvious to communicate with an external device via

the remote controller. The Board's and the Examiner's reasoning is entirely circular, and thus the Board and the Examiner failed to articulate any reason with a rational underpinning why a POSITA would have been motivated to combine Garg with Igoe as proposed.

In the Board's Decision, the Board attempted to sidestep UEI's argument that the Examiner failed to provide the requisite rationale for combining Garg with Igoe by asserting that UEI's argument "is moot in light of the Examiner's refined rationale for the proposed combination." (Appx12 (citing Appx315).) Notably, however, the Board failed to identify this purported "refined rationale." (*Id.*) Indeed, the page of the Examiner's Answer that the Board cited contains no "refined rationale." (Appx315.) Instead, the page merely repeats the Examiner's originally proposed modification to Garg (*i.e.*, transmitting IR commands from Garg's remote controller to an external device, such as a sink or source device). (*Id.*) Thus, the Board's attempt to sidestep the Examiner's failure to articulate a reason to combine Garg with Igoe is without merit.<sup>1</sup>

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<sup>1</sup> The Board also asserted in its Decision that "applying Igoe's feature in the Garg system would have predictably used prior art elements according to their established functions—an obvious improvement." (Appx12 (citing *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 417 (2007)).) However, the Examiner ***never raised this argument*** (*see, e.g.*, Appx230, Appx232, Appx235, Appx315-316), and thus the Board's finding was improper. *See, e.g., In re Stepan Co.*, 660 F.3d 1341, 1344 (Fed. Cir. 2011) (holding that the Board improperly "ma[de] and rel[ied] on new fact

Accordingly, the rejection of claims 1-12 of the ‘451 application should be reversed for this additional reason.

## **VII. CONCLUSION AND STATEMENT OF RELIEF SOUGHT**

For the foregoing reasons, UEI respectfully requests that this Court reverse the Board’s holding that claims 1-12 of the ‘451 application are unpatentable as obvious under 35 U.S.C. § 103.

Dated: June 23, 2022

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findings regarding an issue the examiner did not raise”); *see also In re Biedermann*, 733 F.3d 329, 337-38 (Fed. Cir. 2013).

## **CERTIFICATE OF SERVICE**

I, James J. Lukas, Jr., being duly sworn according to law and being over the age of 18, upon my oath deposes and states that:

I am an employee of GREENBERG TRAURIG, LLP, Attorneys for Appellant.

On June 23, 2022, GREENBERG TRAURIG, LLP authorized me to electronically file the foregoing Brief of Appellant with the Clerk of the Federal Circuit using the CM/ECF System, which will serve e-mail notice of such filing on the following attorneys:

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Upon acceptance by the Court of the e-filed document, I will cause six paper copies of the brief to be filed with the Court, via Federal Express, within the time provided in the Court's rules.

/s/ James J. Lukas, Jr.  
James J. Lukas, Jr.

## **CERTIFICATE OF COMPLIANCE**

This brief complies with the type-volume limitations of Fed. Cir. R. 32(b). This brief contains 5,515 words, excluding the parts of the brief exempted by Federal Rule of Appellate Procedure 32(f) and Fed. Cir. R. 32(b). This brief complies with the typeface requirements of Federal Rule of Appellate Procedure 32(a)(5) and the type style requirements of Federal Rule of Appellate Procedure 32(a)(6). This brief has been prepared in a proportionally spaced typeface using Microsoft Word for Microsoft 365 in fourteen (14) point Times New Roman font.

Dated: June 23, 2022

/s/ James J. Lukas, Jr.

Attorney for Appellant

# ADDENDUM



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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* OLAV B.M. POUW and PATRICK H. HAYES

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Appeal 2020-004505  
Application 15/962,451  
Technology Center 2400

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Before ROBERT E. NAPPI, CATHERINE SHIANG, and  
TERRENCE W. McMILLIN, *Administrative Patent Judges*.

SHIANG, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant<sup>1</sup> appeals under 35 U.S.C. § 134(a) from the Examiner's rejection of claims 1–12, which are all the claims pending and rejected in the application. Appeal Br. 1. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

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<sup>1</sup> We use “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42. Appellant identifies Universal Electronics Inc. as the real party in interest. Appeal Br. 2.



## STATEMENT OF THE CASE

### *Introduction*

The invention relates to “providing an adaptive user interface on an electronic appliance.” Title (capitalization omitted).

Consumer electronic appliances such as set top boxes for receiving and decoding cable and satellite signals, televisions, DVD players, game systems, etc. are well known in the art, as are the hand held controlling devices, for example remote controls, which may be provided for use in issuing commands to these appliances. In some instances these controlling devices may be made available in various forms, for example coded to assist in recognition of individual users in a household; optimized for a specific function such as game playing, web browsing, or movie watching; or specially adapted to the needs of the elderly or of children. While such controlling devices may serve the purposes for which they were intended, in some instances it would be advantageous if the controlled appliance were further enabled to recognize the nature of the controlling device currently in use and adapt its appliance configuration, menuing system, GUI, etc. accordingly.

Spec. 1:11–21. Claims 1 and 5 are exemplary:

1. A method performed by a switching device that is operable to connect at least one of a plurality of source devices to a sink device, the method comprising:

detecting an infrared (IR) signal transmitted by a remote control device, wherein the IR signal transmitted by the remote control device comprises a protocol and a command value that is directly recognizable by a first device among the plurality of source devices and the sink device;

in response to the detection of the IR signal, determining that the remote control device is in use; and

in response to determining that the remote control device is in use, controlling a connection between the at least one of the plurality of source devices and the sink device as a function of the detected IR signal.

5. A switching device, comprising:

a plurality of audio/video (AV) ports;

a receiver; and

control logic that is operable to selectively connect at least one of a plurality of source devices to a sink device each of which is connected to a corresponding one of the plurality of AV ports, the control logic being configured to:

determine that the receiver has received an infrared (IR) signal transmitted by a remote control device, wherein the IR signal transmitted by the remote control device comprises a protocol and a command value that is directly recognizable by a first device among the plurality of source devices and the sink device;

in response to determining that the receiver has received the IR signal, determine that the remote control device is in use; and

in response to at least determining that the remote control device is in use, controlling a connection between the at least one of the plurality of source devices and the sink devices as a function of the detected IR signal.

*References and Rejections<sup>2</sup>*

| <b>Claims<br/>Rejected</b> | <b>35 U.S.C. §</b> | <b>References</b>   |
|----------------------------|--------------------|---|
| 1, 3, 5, 7, 9,<br>11       | 103(a)             | Garg (US 2007/0220150 A1, Sep. 20, 2007),<br>Igoe (US 2013/0187767 A1, Jul. 25, 2013) |
| 2, 4, 6, 8, 10,<br>12      | 103(a)             | Garg, Igoe, Tzeng (US 2008/0291074 A1, Nov. 27,<br>2008)                              |

PRINCIPLES OF LAW

“[W]hen the prior art teaches away from combining certain known elements, discovery of a successful means of combining them is more likely to be nonobvious.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 416 (2007).

“A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant.” *In re Kahn*, 441 F.3d 977, 990 (Fed. Cir. 2006).

“[T]he ‘mere disclosure of alternative designs does not teach away’” and “just because better alternatives exist in the prior art does not mean that an inferior combination is inapt for obviousness purposes.” *In re Mouttet*, 686 F.3d 1322, 1334 (Fed. Cir. 2012).

Although a reference that teaches away is a significant factor to be considered in determining unobviousness, the nature of the teaching is highly relevant, and must be weighed in substance. A known or obvious composition does not become patentable

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<sup>2</sup> Throughout this opinion, we refer to the (1) Non-Final Office Action dated August 22, 2019 (“Non-Final Act.”); (2) Appeal Brief dated December 6, 2019 (“Appeal Br.”); (3) Examiner’s Answer dated April 3, 2020 (“Ans.”); and (4) Reply Brief dated May 28, 2020 (“Reply Br.”).

simply because it has been described as somewhat inferior to some other product for the same use.

*In re Gurley*, 27 F.3d 551, 553 (Fed. Cir. 1994).

## ANALYSIS

### *Obviousness*

We have reviewed and considered Appellant's arguments, but such arguments are unpersuasive. To the extent consistent with our analysis below, we adopt the Examiner's findings and conclusions in (i) the action from which this appeal is taken and (ii) the Answer.

Further, to the extent Appellant advances new arguments in the Reply Brief without showing good cause, Appellant has waived such arguments. *See* 37 C.F.R. § 41.41(b)(2).

### *Claim 5*

On this record, the Examiner did not err in rejecting claim 5.

#### I

Appellant contends "the requirements for presenting a *prima facie* case of obviousness have not been met." Appeal Br. 6. In particular, Appellant argues "the Office has failed to: a) evidence that all of the claimed elements were known in the art;<sup>3</sup> or c) even conclude that the combination of Garg and Igoe would lead one of skill in the art to the exact invention claimed." Appeal Br. 6. Appellant further argues:

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<sup>3</sup> Item b) is discussed below in Section II.

In the rejection of claims, it was acknowledged that Garg does not disclose, teach, or suggest a switching device that is operable to detect/receive and respond to an infrared (IR) signal transmitted by a remote control device wherein the IR signal transmitted by the remote control device comprises a protocol and a command value that is directly recognizable by a first device among the plurality of source devices and the sink device that are connected to the switching device. (OA, pgs. 3-4, 5-6, and 9-10).

It has not been asserted that Igoe discloses, teaches, or suggests a switching device or any other element that is operable to detect/receive and respond to such an IR signal. Rather, it has only been asserted that Igoe discloses “an IR signal transmitted by the remote control device comprises a protocol and a command value that is directly recognizable by first device among the plurality of source device and sink device,” (OA, pgs. 4, 6, and 10).

Appeal Br. 5 (emphases omitted); *see also* Reply Br. 3–5.

Appellant has not persuaded us of error. It is well settled that:

[The USPTO] satisfies its initial burden of production by adequately explain[ing] the shortcomings it perceives so that the applicant is properly notified and able to respond. In other words, the PTO carries its procedural burden of establishing a prima facie case when its rejection satisfies 35 U.S.C. § 132, in notify[ing] the applicant . . . [by] stating the reasons for [its] rejection, or objection or requirement, together with such information and references as may be useful in judging of the propriety of continuing the prosecution of [the] application.

*In re Jung*, 637 F.3d 1356, 1362 (Fed. Cir. 2011) (internal citations and quotation marks omitted).

Specifically, the *Jung* Court finds:

the examiner’s discussion of the theory of invalidity (anticipation), the prior art basis for the rejection (Kalnitsky), and *the identification of where each limitation of the rejected*

*claims is shown in the prior art reference by specific column and line number was more than sufficient to meet this burden.*

*Id.* at 1363 (emphasis added).

Here, the Examiner’s rejection clearly satisfies the requirement of 35 U.S.C. § 132 to establish a prima facie case of unpatentability. The rejection identifies: the theory of unpatentability (obviousness); the prior art basis for the rejection (Garg and Igoe); where each limitation of claim 5 is shown in the references by paragraph and figure numbers, plus additional explanation about how the prior art features are mapped to the claim. *See Jung*, 637 F.3d at 1363; Non-Final Act. 5–7; Ans. 3–7. Similar to the Examiner in *Jung*, the Examiner has done “more than sufficient to meet this burden [of establishing the prima facie case].” The burden then shifts to Appellant to rebut the Examiner’s case.

In order to rebut a prima facie case of unpatentability, Appellant must distinctly and specifically point out the supposed Examiner errors, and the specific distinctions believed to render the claims patentable over the applied reference. *See* 37 C.F.R. § 1.111(b).

Appellant has not carried the burden. In particular, Appellant’s argument that “[i]t has not been asserted that Igoe discloses, teaches, or suggests a switching device or any other element that is operable to detect/receive and respond to” (Appeal Br. 5) (emphases omitted) is unpersuasive because it is not directed to the Examiner’s specific findings. The Examiner finds—and Appellant does not persuasively dispute—Garg teaches:

A switching device . . .  
. . .

determine that the receiver has received an infrared (IR) signal transmitted by a remote control device, . . . a first device among the plurality of source devices and the sink device;

in response to determining that the receiver has received the IR signal, determine that the remote control device is in use; and

in response to at least determining that the remote control device is in use, controlling a connection between the at least one of the plurality of source devices and the sink devices as a function of the detected IR signal.

*See* Non-Final Act. 5–6; Ans. 4, 6.<sup>4</sup> Therefore, Igoe does not need to teach those limitations again.

Similarly, Appellant’s unsubstantiated argument that the proposed combination is not the claimed invention (Reply Br. 3–5) is unpersuasive, because it is not directed to the Examiner’s specific findings and conclusions. Further, Appellant’s attorney arguments (Reply Br. 3–5) are speculative and unpersuasive of Examiner error, as Appellant does not provide sufficient objective evidence to support the arguments. *See In re Geisler*, 116 F.3d 1465, 1470 (Fed. Cir. 1997) (“attorney argument [is] not the kind of factual evidence that is required to rebut a prima facie case of obviousness”); *Meitzner v. Mindick*, 549 F.2d 775, 782 (CCPA 1977) (“Argument of counsel cannot take the place of evidence lacking in the record.”).

Finally, Appellant repeatedly mischaracterizes the Examiner’s statements (*see, e.g.*, Appeal Br. 5, 7; Reply Br. 4–5), which is unhelpful and

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<sup>4</sup> Although we map the preamble for completeness, Appellant has not demonstrated the preamble is limiting.

fails to show Examiner error. For example, Appellant's assertion that on page 6 of the Answer, "the Office has further acknowledged that modifying Garg according to the relied upon teaching in Igoe would not result in the exact invention claimed" (Reply Br. 5) plainly contradicts the record, as the cited page is devoid of such acknowledgement.

## II

Appellant argues the Examiner has not provided the requisite rationale for combining the teachings of Garg and Igoe to teach claim 5. *See* Appeal Br. 5–6; Reply Br. 2–3. In particular, Appellant argues:

while it was concluded that "it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the system/method of sending control command to DVD as disclosed by Igoe to the remote controller as disclosed by Garg in order to communicate with external devices via remote controller" (OA, pgs. 5, 7, and 10) . . . , it was not asserted that it would have been obvious, based on the teachings of Igoe, to modify the switching\_device of Garg such that the switching\_device of Garg would be operable to detect/receive and respond to an infrared (IR) signal transmitted by a remote control device wherein the IR signal transmitted by the remote control device comprises a protocol and a command value that is directly recognizable by a first device among the plurality of source devices and the sink device, i.e., the invention claimed.

Appeal Br. 5–6 (emphases omitted); *see also* Reply Br. 2–3.

We disagree. The U.S. Supreme Court has held "[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results." *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 416 (2007). Contrary to Appellant's arguments, "[i]f the claim extends to what is obvious, it is invalid under § 103" and "the analysis



need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.” *Id.* at 418–19.

The Examiner has provided articulated reasoning with a rational underpinning as to why one skilled in the art would have found it obvious to combine the teachings of Garg and Igoe. *See* Non-Final Act. 7; Ans. 4. In particular, the Examiner finds one skilled in the art would have modified Garg’s system to incorporate Igoe’s feature in order to facilitate communications with the remote controller. *See* Ans. 4. Appellant does not persuasively show why such reasoning is incorrect. Appellant’s argument that the “reasoning does not assert that Igoe discloses, teaches, or suggests a switching device that is able to detect <sup>5</sup> and act upon transmissions that are intended for reception by devices other than the switching device itself (which Igoe does not)” (Reply Br. 3 (emphasis omitted)) is unpersuasive, because it is not directed to the Examiner’s specific findings. As discussed above, the Examiner cites Garg—not Igoe—for teaching the determining limitation (as recited in claim 5) and the detecting limitation (as recited in claim 1). *See* Non-Final Act. 3, 5. Further, Appellant’s attorney argument that “the Office has admitted that Igoe adds nothing to the disclosure within Garg” (Reply Br. 5) plainly contradicts the record. *See* Ans. 4 (stating the opposite of what Appellant argues).

The Examiner’s findings and conclusion are reasonable because the skilled artisan would “be able to fit the teachings of multiple patents together

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<sup>5</sup> While claim 1 recites a detecting limitation, claim 5 recites “determine . . . .” *See* claims 1 and 5.

like pieces of a puzzle,” as the skilled artisan is “a person of ordinary creativity, not an automaton.” *KSR*, 550 U.S. at 420–21. Appellant does not present adequate evidence that the resulting arrangements would have been “uniquely challenging or difficult for one of ordinary skill in the art” or “represented an unobvious step over the prior art.” *Leapfrog Enters., Inc. v. Fisher-Price, Inc.*, 485 F.3d 1157, 1162 (Fed. Cir. 2007) (citing *KSR*, 550 U.S. at 418–19).

Accordingly, we agree with the Examiner that applying Igoe’s feature in the Garg system would have predictably used prior art elements according to their established functions—an obvious improvement. *See KSR*, 550 U.S. at 417.

Finally, Appellant’s argument (Appeal Br. 5–6) is moot in light of the Examiner’s refined rationale for the proposed combination. *See* Ans. 4. Appellant’s assertion that the Examiner should withdraw the rejection because the Examiner refined the reasoning in the Answer (Reply Br. 3) is unpersuasive, as Appellant cites no basis for that assertion. To the extent Appellant is arguing the refined reasoning constitutes a new ground of rejection, that argument is a petitionable—not appealable—matter and is therefore, not before us. *See* 37 C.F.R. § 41.40(a) (“Any request to seek review of the primary examiner’s failure to designate a rejection as a new ground of rejection in an examiner’s answer must be by way of a petition to the Director under § 1.181 of this title filed within two months from the entry of the examiner’s answer and before the filing of any reply brief. Failure of appellant to timely file such a petition will constitute a waiver of any arguments that a rejection must be designated as a new ground of rejection.”); *see also* MPEP § 1002.02(c) (Petitions and Requests Decided

by the Technology Center Directors); *see also* MPEP § 1201 (“The Board will not ordinarily hear a question that should be decided by the Director on petition . . .”).

### III

Appellant argues the proposed combination would cause Garg’s switching device to “be rendered inoperable.” Appeal Br. 8; *see also* Appeal Br. 7–8; Reply Br. 5.

An argument that the system is rendered “inoperable for its intended purpose” is a “teach away” argument. *In re Gordon*, 733 F.2d 900, 902 (Fed. Cir. 1984) (The court concluded that in effect, “French teaches away from the board’s proposed modification” because “if the French apparatus were turned upside down, it would be rendered inoperable for its intended purpose”).

In this case, Appellant’s following attorney arguments are speculative and unpersuasive, as Appellant does not provide sufficient objective evidence to support the arguments. *See Geisler*, 116 F.3d at 1470; *Meitzner*, 549 F.2d at 782:

Garg discloses a system that includes a switching device, to which is connected a plurality of source devices and a sink device, and an IR remote controller that is operable to transmit an IR signal to the switching device for the purpose of commanding the switching device to connect a particular source device to the sink device through the switching device.

Appeal Br. 6 (emphases omitted);

It is further respectfully submitted that, because nothing within Garg discloses, teaches, or suggests that the switching device of Garg is intended to detect/receive an IR signal that is operable to

control a device other than the switching device (e.g., Garg does not disclose the switching device detecting a command transmitted for purposes of controlling a TV or a set-top box), Garg must also fail to disclose, teach, or suggest a switching device that will respond to the detection/reception of the IR signal (that is operable to control a one of plurality of source devices and the sink device) to thereby determine that the remote control device is in use as further claimed.

Accordingly, based on the disclosure within Garg and the acknowledgements set forth in the rejection of the claims as to what is missing from within Garg in the first instance, it must be taken as fact that the switching device of Garg is incapable of detecting/receiving and responding to an IR signal transmitted by the remote control device when the IR signal transmitted by the remote control device comprises a protocol and a command value that is directly recognizable by a first device among a plurality of source devices and the sink device that are coupled to the switching device, e.g., when a remote control is used to transmit a command to a DVD player.

In view of the foregoing, it is respectfully submitted that, if the remote controller of Garg were to be modified to send control signals using a protocol and a command value that is directly recognizable by the DVD player as asserted and relied upon in rejecting the claims at issue, the switching device of Garg, which is incapable of detecting and responding to such control signals, would be rendered inoperable, i.e., the switching device of Garg would no longer be capable of being operated by the remote controller so modified as the switching device of Garg would--;as is conventional—ignore an IR signal that is intended for receipt by the DVD player.

(Appeal Br. 7–8 (emphases omitted)).

Additionally, Appellant argues that Garg's paragraph 55 and 64–66 [d]escribe[] that the switching device can be commanded to connect a source device to the sink device by a user interacting with a front panel provided to the switching device and/or by

the user using the remote controller to transmit to the switching device an IR signal having an AV input selection command, i.e., an IR signal that is intended to be received and acted up by the switching device to thereby control the AV input selection functional operation of the switching device.

Appeal Br. 6–7 (emphases omitted).

However, according to Garg:

FIG. 4 illustrates one embodiment of a source switching method when manual and/or remote selection of the source devices is supported and currently enabled. If at least one source device is detected (in step 320), the method of FIG. 4 may detect whether or not the user has selected a particular source device via manual or remote selection means (in step 340). For example . . . .

Garg ¶ 55.

In some cases, the front panel may include remote selection means for connecting a particular source device to the sink. For example . . . .

In some cases, the front panel may include manual selection means for connecting a particular source device to the sink in addition, or alternative to, the remote selection means mentioned above. For example . . . .

In some embodiments, the manual/remote selection means provided on the front panel of the hub may be used to assign priority data to the connected source devices. In one example . .

..  
Garg ¶¶ 64–66.

Appellant has not persuasively explained that Appellant’s description (Appeal Br. 6–7) accurately reflects the substance of the above paragraphs. In any event, regardless of whether the description

is indeed accurate, Appellant does not persuasively explain why that description demonstrates Examiner error.

In short, Appellant’s teaching away arguments are unpersuasive because Appellant fails to provide adequate analysis under the case law. Appellant fails to show one skilled in the art “would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant.” *Kahn*, 441 F.3d at 990.

Because Appellant has not persuaded us the Examiner erred, we sustain the Examiner’s rejection of independent claim 5.

For effective resolution of issues, we encourage Appellant to state *precisely* which claim limitation is missing in the Examiner’s mappings, *analyze the reference portions cited* by the Examiner for that limitation, and *clearly explain why the reference portions cited* by the Examiner—not merely explanation from the Examiner—do not teach that limitation. We also recommend clear, concise sentences with reasonable length. *Contra* Appeal Br. 5–6 (including a paragraph with only a single sentence, which lasts 10 lines); Reply Br. 4 (including a paragraph with only a single sentence, which lasts 9 lines).

*Claims 1–4 and 6–12*

For similar reasons discussed above with respect to claim 5, we sustain the Examiner’s rejection of independent claims 1 and 9.

We also sustain the Examiner's rejection of corresponding dependent claims 2–4, 6–8, and 10–12, as Appellant does not advance separate substantive arguments about those claims. *See* 37 C.F.R. § 41.37(c)(1)(iv).

### CONCLUSION

We affirm the Examiner's decision rejecting claims 1–12 under 35 U.S.C. § 103.

### DECISION SUMMARY

In summary:

| <b>Claims Rejected</b> | <b>35 U.S.C. §</b> | <b>Reference(s)/Basis</b> | <b>Affirmed</b>    | <b>Reversed</b> |
|------------------------|--------------------|---------------------------|--------------------|-----------------|
| 1, 3, 5, 7, 9, 11      | 103                | Garg, Igoe                | 1, 3, 5, 7, 9, 11  |                 |
| 2, 4, 6, 8, 10, 12     | 103                | Garg, Igoe, Tzeng         | 2, 4, 6, 8, 10, 12 |                 |
| <b>Overall Outcome</b> |                    |                           | 1–12               |                 |

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv). *See* 37 C.F.R. § 41.50(f).

AFFIRMED

## **REJECTED CLAIMS ON APPEAL**

1. A method performed by a switching device that is operable to connect at least one of a plurality of source devices to a sink device, the method comprising:

detecting an infrared (IR) signal transmitted by a remote control device, wherein the IR signal transmitted by the remote control device comprises a protocol and a command value that is directly recognizable by a first device among the plurality of source devices and the sink device;

in response to the detection of the IR signal, determining that the remote control device is in use; and

in response to determining that the remote control device is in use, controlling a connection between the at least one of the plurality of source devices and the sink device as a function of the detected IR signal.

2. The method of claim 1, wherein the IR signal transmitted by the remote control device further comprises a device identification code that indicates the first device and wherein controlling the connection comprises controlling the connection as a function of the device identification code.

3. The method of claim 1, wherein the switching device comprises an audio/video switch, one of the plurality of source devices comprises a set-top-box, and the sink device comprises a television.



4. The method of claim 1, wherein the receiver comprises a universal IR receiver capable of identifying and decoding IR signals comprising protocols used by a multiplicity of manufactures.

5. A switching device, comprising:

a plurality of audio/video (AV) ports;

a receiver; and

control logic that is operable to selectively connect at least one of a plurality of source devices to a sink device each of which is connected to a corresponding one of the plurality of AV ports, the control logic being configured to:

determine that the receiver has received an infrared (IR) signal transmitted by a remote control device, wherein the IR signal transmitted by the remote control device comprises a protocol and a command value that is directly recognizable by a first device among the plurality of source devices and the sink device;

in response to determining that the receiver has received the IR signal, determine that the remote control device is in use; and

in response to at least determining that the remote control device is in use, controlling a connection between the at least one of the plurality of source devices and the sink devices as a function of the detected IR signal.

6. The switching device of claim 5, wherein the IR signal transmitted by the remote control device further comprises a device identification code that indicates the first device and wherein controlling the connection comprises controlling the connection as a function of the device identification code.

7. The switching device of claim 5, wherein the switching device comprises an audio/video switch, one of the plurality of source devices comprises a set-top-box, and the sink device comprises a television.

8. The switching device of claim 5, wherein the receiver comprises a universal IR receiver capable of identifying and decoding IR signals comprising protocols used by a multiplicity of manufactures.

9. A switching device, comprising:

a plurality of audio/video (AV) ports;

a receiver; and

control logic that is operable to selectively connect at least one of a plurality of source devices to a sink device each of which is connected to a corresponding one of the plurality of AV ports, the control logic being configured to:

determine that the receiver has received an infrared (IR) signal transmitted by a remote control device, wherein the IR signal transmitted by the remote control device comprises a protocol and a command value that is directly recognizable by at least a source device among the plurality of source devices and the sink device;

in response to determining that the receiver has received the IR signal, determine that the remote control device is in use; and

in response to determining that the remote control device is in use:

identify the source device that is associated with the remote control device from among the plurality of source devices;

identify a first AV port from among the plurality of AV ports to which the identified source device is connected; and connect the first AV port to the AV port to which the sink device is connected.

10. The switching device of claim 9, wherein the control logic is configured to identify the source device from among the plurality of source devices that is associated with the remote control device by detecting a device identification code included in the IR signal.

11. The switching device of claim 9, wherein one of the plurality of source devices comprises a set-top-box and the sink device comprises a television.

12. The switching device of claim 9, wherein the receiver comprises a universal IR receiver capable of identifying and decoding IR signals comprising protocols used by a multiplicity of manufactures.